

OIL ANALYSIS REPORT

Sample Rating Trend





NWW GREENWOOD DT864 Component 1 Diesel Engine Fluid

Fluid FACTORY (38 QTS)

DIAGNOSIS Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORM	ΛΑΤΙΟΝ	method	limit/base	current	historv1	historv2
Sample Number		Client Info		PC 40102368		
Sample Date		Client Info		10 Oct 2023		
Machine Age		Client Info		25000		
Oil Age		Client Info		25000		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINATI	ON	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS	5	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>120	51		
Chromium	ppm	ASTM D5185m	>20	3		
Nickel	ppm	ASTM D5185m	>5	0		
Titanium	ppm	ASTM D5185m	>2	1		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>20	45		
Lead	ppm	ASTM D5185m	>40	0		
Copper	ppm	ASTM D5185m	>330	53		
Tin	ppm	ASTM D5185m	>15	3		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 36	history1	history2
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	limit/base	current 36 0	history1 	history2
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 36 0 111	history1 	history2
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 36 0 111 3	history1 	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 36 0 111 3 631	history1 	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 36 0 111 3 631 1503	history1 	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 36 0 111 3 631 1503 643	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 36 0 111 3 631 1503 643 832	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 36 0 111 3 631 1503 643 832 2139	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 36 0 111 3 631 1503 643 832 2139 current	history1 history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN ^T Silicon	ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 36 0 111 3 631 1503 643 832 2139 current 64	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN ^T Silicon Sodium	ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base limit/base >25	current 36 0 111 3 631 1503 643 832 2139 current 64 6	history1 history1	history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN ^T Silicon Sodium Potassium	ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base limit/base >25 >20	current 36 0 111 3 631 1503 643 832 2139 current 64 6 120	history1 history1 history1	history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN ^T Silicon Sodium Potassium Fuel	ppm	method ASTM D5185m ASTM D5185m	limit/base limit/base >25 >20 >3.0	current 36 0 111 3 631 1503 643 832 2139 current 64 6 120 0.4	history1 history1 history1	history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base limit/base >25 >20 >3.0 limit/base	current 36 0 111 3 631 1503 643 832 2139 current 64 6 120 0.4 current	history1 history1 history1 history1 history1	history2 history2 history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm	method ASTM D5185m	limit/base >25 >20 >3.0 limit/base >4	current 36 0 111 3 631 1503 643 832 2139 current 64 6 120 0.4 current 0.4	history1 history1 history1 history1	history2 history2 history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base limit/base >25 >20 >3.0 limit/base >4 >20	current 36 0 111 3 631 1503 643 832 2139 current 64 6 120 0.4 current 0.5 11.4	history1 history1 history1 history1 history1	history2 history2 history2 history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm r s ppm ppm s ppm s ppm s ppm s ppm s ppm s ppm s ppm s ppm s ppm s ppm s ppm s p s s s s	method ASTM D5185m	limit/base limit/base >25 >20 >3.0 limit/base >4 >20 >30	current 36 0 111 3 631 1503 643 832 2139 current 64 6 120 0.4 current 0.5 11.4 23.7	history1	history2 history2 history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D7844 *ASTM D7415 Method	limit/base >25 >20 >3.0 limit/base >4 >20 >30 limit/base	current 36 0 111 3 631 1503 643 832 2139 current 64 6 120 0.4 current 0.5 11.4 23.7 current	history1 history1 history1 history1 history1	history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD Oxidation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D7844 *ASTM D7415 method *ASTM D7414	limit/base limit/base >25 >20 >3.0 limit/base >4 >20 >30 limit/base >20 >30	current 36 0 111 3 631 1503 643 832 2139 current 64 6 120 0.4 current 0.5 11.4 23.7 current 23.4	history1 history1 history1 history1 history1	history2



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0ct10/23 Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 **NW WHITE & CO - GREENWOOD DIVISION** Sample No. : PCA0102368 Received : 12 Oct 2023 411 QUARRY ROAD Lab Number : 05976752 Tested : 16 Oct 2023 GREENWOOD, SC Unique Number : 10688702 Diagnosed : 16 Oct 2023 - Jonathan Hester US 29149 Test Package : FLEET (Additional Tests: FuelDilution, KV40, PercentFuel) Contact: Mitchell Brown Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. greenwoodshop@nwwhite.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (864)389-9553 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) E:

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Submitted By: Mitchell Brown